5. Descriptions of new Genera and Species of Lepidoptera Heterocera, collected by Rev. J. H. Hocking, chiefly in the Kangra District, N.W. Himalaya. By F. Moore, F.Z.S.

[Received June 12, 1888.]

Fam. Sphingidæ.

POLYPTYCHUS TRILINEATUS, n. sp.

Allied to *P. dentatus* and *P. timesius*. Upperside of a paler brownish-ochreous colour than *P. dentatus*; fore wing crossed by a slightly waved oblique antemedial brown line, a less distinct medial inwardly-oblique line which touches the end of the cell in crossing, and a waved postmedial line; the medial and apical area clouded with darker brown: hind wing with an indistinct greyish transverse discal narrow fascia.

Expanse  $3\frac{7}{8}$  inches.

Hab. Dharmsala. In coll. British Museum.

### Ambulyx placida, n. sp.

Upperside—fore wing pale purplish lilacine greyish-brown; crossed by an indistinct single antemedial zigzag slender brown line, an oblique outwardly-curved postmedial line followed by three less distinct wavy discal lines, and a prominent outer marginal inwardlycurved olivaceous-bordered line, the latter also bent inward below the apex and then curving upward to the costa; the area between the postmedial line and outer margin being darker than the basal area; a small blackish-brown pale-bordered round spot at basal end of the cell; a large spot below the submedian near the base, and a less perfectly formed rounded spot on the costal edge above the latter, a less distinct smaller spot also at the lower end of the discocellular veinlet: hind wing dull yellowish-ochreous, with an oblique transverse medial and a marginal lilacine-blackish band with two interdiscal oblique series of similar coloured spots. Body pale purplish lilacine greyish-brown; a broad blackish-brown frontal band, and a similar broad hindwardly-confluent band down each side of the thorax; abdomen with pale ochreous segmental bands and anal tuft.

Expanse  $4\frac{1}{4}$  inches.

Hab. N.W. Himalaya. In coll. British Museum.

Nearest allied to A. sericeipennis, Butler, P.Z.S. 1875, p. 251. A male specimen collected at Solun, N. Punjab, by Capt. R. B. Reed, is also in Mr. Moore's collection.

# Dahira, n. g.

Fore wing elongated, narrow; costa arched towards the end, apex produced; exterior margin very oblique, slightly concave below the apex, even; first subcostal branch emitted at one fourth, second at

two thirds between the base of second and end of the cell, third at a short distance beyond the cell, fourth and fifth at one third beyond the cell; discocellulars inwardly-oblique, slightly concave, upper longest, radial from near the lower end; middle median at one-sixth and lower at one half before end of the cell; submedian much recurved from the base. Hind wing short; cell extending to less than half length of the wing; two subcostals from end of the cell, the upper curving slightly npward from the end; discocellulars outwardly-oblique, recurved, radial from the middle; the middle median vein at one eighth and lower at one third before end of the cell; submedian and internal slightly recurved. Body long.

Allied to Pergesa.

## Dahira Rubiginosa, n. sp.

Male. Fore wing dark reddish olivaceous-brown; crossed by three indistinct outwardly-oblique darker waved lines, three or four discal inwardly-oblique lines, and a curved line from the apex, the latter white-speckled; a blackish discocellular spot; cilia black, minutely spotted with white: hind wing red, the abdominal area and extreme outer margin brownish; cilia white. Body dark reddish-brown above, yellow beneath, with dull greyish-white dorsal segmental bands. Wings beneath dull paler red; both wings crossed by indistinct discal darker waved lines; legs greyish-white above.

Expanse  $2\frac{7}{5}$  inches.

Hab. Mundi, N.W. Himalaya. In coll. British Museum. "Taken at Mundi (a native state), in March; at sugar." (Hocking).

# AMPELOPHAGA FASCIOSA, n. sp.

Male and Female. Fore wing pinkish olivaceous-brown; crossed by two outwardly-curved oblique indistinctly darker brown narrow subbasal fasciæ, a broader medial fascia, and two slender discal lunular fasciæ, beyond which a streak ascends to the apex, the outer border of the wing being much paler; an indistinct spot at end of the cell: hind wing dusky purplish ochreous-brown, with an indistinctly paler pinkish discal fascia, and cilia. Body darker ochreous olive-brown, pinkish beneath, with an ochraceous-white dorsal line, and a lateral line on thorax.

Expanse  $3\frac{1}{4}$  inches.

Hab. Dharmsala. In coll. British Museum.

Taken at sugar only, by Mr. Hocking. Specimens taken at Umballa by Capt. R. B. Reed are also in Mr. Moore's collection.

# HEMARIS SIMILLIMA, n. sp.

Nearest allied to *H. fuciformis*. Fore wing with a vinous-black costal, outer, and posterior marginal band, the outer band somewhat narrower than in *H. fuciformis*, the posterior band sparsely covered with olive-green scales: hind wing with cupreous-red marginal band, the abdominal border prominently white-speckled. Head, thorax, and base of abdomen pale dull ochraceous olive-brown, the two red

bands of a dull chestnut tint, basal segments yellowish-ochreous, anal lateral tuft black.

Expanse  $1\frac{7}{10}$  inch.

Hab. Kangra Valley. In coll. British Museum.

#### Fam. ÆGERIIDÆ.

MELITTIA KULLUANA, n. sp.

Nearest M. nepcha (Moore, Lep. Coll. Atkinson, p. 10). Wings comparatively shorter; apical area of fore wing traversed by four veins; a short black vein projecting within the cell from middle of the discocellular streak. Thorax, head, palpi, pectus, and femora beneath olivaceous-yellow; abdomen above purple-black, with narrow pale bluish segmental bands; abdomen beneath bluish-white; palpi slightly black-fringed; mid legs black, fringed with golden-yellow hairs; hind legs densely clothed with long black hairs, hind femora and tibiæ above with interspersed dull chestnut-red and yellow hairs.

Expanse  $1\frac{1}{10}$  inch.

Hab. Kullu. In coll. British Museum.

From M. indica, Butler, this may be distinguished by its much broader transparent apical area.

#### Fam. CALLIDULIDÆ.

Pterodecta anchora, n. sp.

Upperside olive-brown. Fore wing with a large orange-red anchorshaped transverse discal mark. Underside brownish-ochreous: fore wing with the orange-yellow band black-bordered; a white spot at end of the cell and two smaller spots in the middle; hind wing tessellated more or less with yellow and black strigæ, which form transverse fasciæ; a yellow spot at end of the cell.

Expanse  $1\frac{1}{2}$  inch. Hab. Dharmsala.

#### Fam. LITHOSIIDÆ.

SETINA CALAMARIA, n. sp.

Fore wing ochreous-yellow, with a prominent black triangular discocellular spot, a smaller spot at base of the cell, and another spot on base of the costal margin: hind wing paler yellow, a black spot on each tegula, and two on the middle of thorax; tip of fore tibia, and of all tarsi fuliginous black.

Expanse  $1\frac{1}{8}$  inch.

Hab. Palampore. In coll. British Museum.

ÆMENE SAGITTIFERA, n. sp.

Male and Female. Creamy-white: fore wing with five large spots on the costal border, a sagittate spot within the cell near base, a triangular spot at end of the cell, two smaller linear spots on the subcostal vein, two on each of its branches, two on the median, and four on the submedian, these spots forming four transverse series; the fifth costal spot having a few blackish speckles only below it; on the costal margin is also a row of regularly-disposed small black

spots: hind wing cinereous-white. Thorax black-spotted; palpi brown; legs with blackish bands.

Expanse,  $\delta \frac{8}{12}$ ,  $Q \frac{9}{12}$  inch.

Hab. Dharmsala (Hocking); N.W. India (Leitner). In coll. British Museum and F. Moore.

Taken at sugar.

ÆMENE INCONSTANS, n. sp.

Male. Fore wing very pale brownish-ochreous, crossed by an antemedial and a postmedial very indistinct dusky sinuous line, both lines with two medially-disposed black spots, the upper spot at end of the cell on the latter being the largest; on the costal margin are three or four indistinct spots, and on the outer margin is a row of regularly-disposed small linear spots; a dusky zigzag fascia crosses the disk: hind wing ochreous-white. Thorax pale brownish-ochreous; palpi and abdomen pale ochreons; legs brownish-ochreous.

Expanse  $\frac{9}{12}$  inch.

Hab. Dharmsala. In coll. British Museum.

Rœselia scripta, n. sp.

Male. Allied to R. confusalis: fore wing pinkish-grey, basal area slightly brown-speckled; crossed by two contiguous inwardly-oblique antemedial black lines, and two recurved postmedial lines, followed by a submarginal series of black spots, of which the upper and lower spot is large, the others small and dentate; the area between the medial lines traversed by a zigzag black line: hind wing and abdomen pale pinkish-cinereous. Thorax, palpi, and legs above, and antennæ greyish-brown.

Expanse,  $\sqrt[3]{\frac{7}{10}}$  inch.

Hab. Dharmsala. In coll. British Museum.

Rœselia fraterna, n. sp.

Female. Near to R. cuculatella: fore wing comparatively narrower; the antemedial blackish-speckled transverse line more angular and broader at the costal end, the postmedial line also more irregularly sinuous: hind wing cinereous-white, underside much paler. Thorax grey; palpi and legs brownish above; tarsi with pale bands.

Expanse  $\frac{8}{12}$  inch.

Hab. Kullu. In coll. British Museum.

RŒSELIA ANGULATA, n. sp.

Near R. cristulalis: fore wing greyish-white, sparsely brown-speckled; crossed by a prominent blackish antemedial curved outwardly-angulated band, a postmedial pale-bordered sinuous line, and a similar submarginal line, the postmedial line preceded by a broad costal patch: hind wing and abdomen cinereous-grey. Thorax white, crossed by a blackish band; palpi and legs brownish; tarsi with pale bands.

Expanse,  $\sqrt[3]{\frac{7}{12}}$ ,  $\sqrt{2}$ ,  $\sqrt[9]{\frac{9}{12}}$  inch.

Hab. Dharmsala (Hocking); N.W. India (Leitner). In coll. British Museum and F. Moore.

#### Fam. ARCTHDÆ.

SPILARCTIA DALBERGIÆ, n. sp.

Allied to S. stigmata (Moore, P. Z. S. 1865, p. 809). Fore wing of a pale ochreous creamy tint; with a very obliquely-disposed discal series of small slender black spots, a spot towards base of submedian, and a submarginal medial series of smaller spots; a small dentate spot more or less distinct at the upper end of cell: hind wing paler; with a large black spot at upper end of the cell; two duplex subanal spots, one also between the radial and subcostal vein, and in the female another before the apex. Thorax with a black streak down the middle; abdomen orange-yellow, with a dorsal and lateral row of black spots.

Expanse,  $\delta$  1 $\frac{5}{8}$ ,  $\circlearrowleft$  2 inches.

Hab. Dharmsala. In coll. British Museum.

Larva pale purple-brown, mottled and minutely spotted with yellow. Second, third, and fourth segments with a small yellow lateral spot; other segments with an oblique yellow lateral streak; each segment with tufts of long purple-brown radiating hairs; head black, shining; lcgs black.

"Feeds on Sissoo (Dalbergia sissoo). May, 4000 feet." (Hock-

ing.)

#### SPILARCTIA SAGITTIFERA, n. sp.

Male and Female. Paler and of a uniformly yellower tint than S. casignata. Fore wing with similar markings, the transverse discal series of spots more oblique, touching the lower angle of the cell and terminating in larger spots on middle of posterior margin; one or two spots also within the cell near the base; hind wing paler yellow throughout, spots larger than in S. casignata. Abdomen crimson, with more or less prominent black dorsal and lateral spots; a small black sagittate streak on middle of thorax. Underside paler, not washed with crimson, markings more distinct.

Expanse,  $\delta 1\frac{6}{8}$ ,  $22\frac{4}{8}$  inches.

Hab. Dharmsala. In coll. British Museum.

# ICAMBOSIDA DORSALIS, n. sp.

White; fore wing with an indistinct blackish-grey discal oblique transverse narrow macular band, which in the male stops below the radial vein, and in the female extends to the apex by a series of short linear streaks, the female also having some less distinct submarginal streaks situated between the radial and middle median veins; a similar coloured spot at upper end of the cell, and a less defined spot sometimes on middle of subcostal: hind wing with an indistinct spot at upper end of the cell, and a less distinct subanal spot situated between the lower median and submedian, the female sometimes showing a spot also below the apex and another above it on the costa. Sides of thorax in front and pectus crimson; palpi black above, crimson beneath; legs white; fore femur crimson above; femora tipt with black; fore and middle tibiæ and tarsi and hind tarsi black above; abdomen in male crimson above, with black

lateral spots, and in female with dorsal spots; anal segments in female white.

Expanse,  $\delta l_{\frac{3}{10}}$ ,  $Q l_{\frac{7}{10}}$  to  $l_{\frac{9}{10}}$  inch.

Hab. Dharmsala. In coll. British Museum.

This has much the appearance of Spilosoma rubidorsa (Moore, P. Z. S. 1865, p. 808), but differs in the narrower and more elongated

form of fore wing.

Larva pale yellowish cream-colour, with a broad dorsal purplebrown band; each segment laterally with finely-speckled purplebrown oblique streaks, the segments also with sparse dorsal tufts of fine brown and grey hairs and lateral tufts of grey hairs, the dorsal tufts springing from glossy purple-black tubercles; dorsal band with a central row of linear yellowish spots and slender transverse segmental streaks; head red; legs yellow.

"Feeds on cherry; July 14; gregarious whilst young; many hundreds together in a web; afterwards spreading over the tree and devouring all before them. Pupa, July 28; imago, August 16."

### CHALLA QUADRIMACULATA, n. sp.

Allied to *C. bimaculata*. Ochreous-yellow; fore wing comparatively broader and more regularly triangular in form; with a prominent black spot at upper end of the cell, and a less distinct similarly disposed spot on the hind wing. Palpi black-tipped; legs blackish above.

Expanse  $1\frac{1}{4}$  inch.

Hab. Palampore. In coll. British Museum.

### Fam. PSYCHIDÆ.

# AKESINA, n. g.

Wings somewhat elongated, oval; semitransparent; sparsely clothed with very short slender hairy scales. Fore wing very convex at the apex; costal vein extending to near the apex; cell long, extending beyond two thirds the wing; first subcostal emitted at one eighth before end of the cell, bent upward and anastomosing with the costal for a short distance and terminating before the apex; second and third branches on a footstalk beyond end of the cell; discocellular twice-angled, the angles at equal distances, upper angle directed slightly outward, lower angle directed very obliquely inward, radial from upper angle; a discoidal veinlet emitted within the cell from lower angle and extending to base of cell; two upper median veins from angles at end of the cell, middle median from one third and lower median from one half before end of the cell; submedian nearly straight and apparently looped at the base. Hind wing very convex externally; subcostal vein running very close along the margin, arched at the base and thence straight to apex, the branch emitted closely before end of the cell; discocellular, radial, and discoidal veinlet as in fore wing; two upper median veins at wider angles from end of the cell, middle median at one third and lower at one half before end of the cell; submedian and internal vein slightly recurved. Body short, slightly pilose; legs almost naked; antennæ short, broadly bipectinated, the pectinations plumose; palpi very minute.

AKESINA BASALIS, n. sp.

Wings semitransparent, pale fuliginous; the lower basal area of fore wing and entire basal area of hind wing pale ferruginous-red; body and legs ferruginous-red; antennæ brown.

Expanse  $1\frac{1}{10}$  inch.

Hab. Dharmsala. In coll. British Museum.

### BARANDRA, n. g.

Wings short, broad, nearly naked. Fore wing somewhat obovate; costa slightly arched near the end, apex very convex; exterior margin oblique and slightly rounded, posterior angle convex; costal vein nearly straight; subcostal angled close to end of the cell, fourbranched, first branch arising at half length and second at angle before end of the cell, third bifid at one third beyond the cell; cell very broad; discocellulars angled inward, upper bent slightly outward, the radial branch starting from its angle; a single discoidal veinlet emitted within the cell from middle of discocellulars; median vein four-branched, curved hindward to lower branch and angled at each branch, the branches short, wide apart, and nearly equidistant; submedian slightly angled near its end, emitting a short lower spur from the angle. Hind wing oval; exterior margin very convex; costal vein extending to apex; subcostal vein extending from base to below the apex, and joined to the costal by a short cross branch about one third from its base; cell broad; discocellulars outwardly oblique and slightly angled at the middle, the discoidal veinlet being emitted within the cell from the angle; radial vein four-branched, angled at the branches; a submedian vein. Body small, slender; abdomen not extending beyond anal angle of hind wing, slightly and finely pilose; head nearly naked; legs long, very slender, naked; palpi minute, pilose; antennæ bipectinate, the pectinations wide and delicately plumose.

BARANDRA FUMATA, n. sp.

Wings nearly naked, pale fuliginous-grey; body yellowish, sparsely pilose, hairs grey; thorax above in front and behind black; antennæ pale brown, shaft yellow; legs yellow.

Expanse  $\frac{1}{1}\frac{6}{2}$  inch.

Hab. Dharmsala. In coll. British Museum.

"A case-bearing larva; on rocks, June 7, 8000 feet. Moth emerged July 11." (Hocking.)

# DASARATHA, n. g.

Wings broad, short, sparsely clothed with short fine hairy scales. Fore wing trigonal; costa slightly arched near the end, apex convex; exterior margin very oblique, slightly concave in middle; posterior margin slightly convex at the base; costal vein extending to two

thirds the margin; subcostal five-branched, first and second branches arising before end of the cell, third trifurcate beyond the cell; discocellulars inwardly-oblique; cell shortest hindward; radial starting from middle of discocellulars; two discoidal veinlets emitted from lower discocellular, coalescing in the middle and extending to base of the cell; median vein four-branched, the two upper branches on a footstalk beyond end of the cell, lower branches wide apart; submedian vein with an inner branch to the base, from below which starts a short, outwardly-oblique spur. Hind wing bluntly ovate; exterior margin slightly convex; subcostal vein two-branched, first branch before end of the cell; cell short and broad; discocellulars angled in the middle; radial from their angle; two discoidal veinlets within the cell, as in fore wing; median vein four-branched, the two upper branches from end of the cell; a submedian and two internal veins. Body small; abdomen short, slender; antennæ bipectinate, finely plumose; legs nearly naked, fore tibiæ with a long parallel spur.

### DASARATHA HIMALAYANA, n. sp.

Wings sparsely clothed with short fuliginous-brown delicate hairy scales: body fuliginous-brown; thorax blackish above; antennæ brown; legs yellow.

Expanse  $\frac{9}{12}$  inch.

Hab. Dharmsala. In coll. British Museum.

"A case-bearing larva; on oak (Q. alba), May, 6200 feet. Moth emerged June 16." (Hocking.)

# Mahasena hockingii, n. sp.

Male. Wings dark fuliginous-brown; hind wing blackish posteriorly; thorax fuliginous-black in front, the lower part slightly ochreous-brown; abdomen and anal tuft clothed with longish laterally-divergent black hairs. Fore wing beneath ochreous-grey broadly along posterior border. Antennæ fuliginous-brown, shaft ochreous; femora and tibiæ clothed with brown hairs.

Expanse  $1\frac{2}{12}$  inch.

Hab. Dharmsala. In coll. British Museum.

"July, 4000 feet. On Toon tree (Credela toona). When the larva changed, the pupa had the power of moving up and down the silky passage in which it had lived. When the moth was coming out, it projected the tail-end of the pupa and let itself down by a silken thread, in the chrysalis, from which it then emerged and to which it clung with two pairs of legs until the wings expanded and dried, whilst the first pair of legs held on to the silken thread by which it hung from the leafy case." (Hocking.)

# Fam. LIPARIDÆ.

# LACHANA, n. g.

Male. Fore wing elongate, narrow; costal vein extending two thirds the margin; first subcostal emitted at one half and second at one fifth before end of the cell, second trifurcate; third starting at a

short distance from above its base and terminating at the apex, fourth at two thirds from base of the third; fifth from end of the cell, curving upward and touching third near its base; cell broad, extending nearly two thirds the wing; discocellular concave; radial and upper median from lower end of the cell, middle median from angle close to end of the cell, lower median at one third before the end; submedian at a wide distance from the median. Hind wing short, triangularly-ovate; apex and exterior margin convex; abdominal margin short; costal vein looped to subcostal near its base; subcostal bent upward to costal at one third from its base, two subcostal branches on a footstalk one third beyond end of the cell; discocellular oblique, radial from slight angle near its lower end; cell broad; two upper medians from immediately beyond end of the cell; lower median at one fourth before the end; submedian and internal vein straight. Body short, densely pilose; antennæ bipectinated; palpi laxly pilose; legs thick, slightly pilose.

### LACHANA LADAKENSIS, n. sp.

Male. Brownish-ochreous; fore wing numerously covered with dark sepia-brown scales, which are most thickly disposed on the basal and external area, across which extends a darker subbasal and a discal zigzag fascia; a distinct dark-brown lunular spot at end of the cell; hind wing sepia-brown, darkest externally and indistinctly forming a darker marginal band; cilia brownish-ochreous. Body umber-brown, hairs brownish-grey; frontal tuft and palpi grey; antennæ reddish-brown, shaft greyish; fore and middle tibiæ and tarsi reddish-brown.

Expanse 1 inch.

Hab. Ladak. In coll. British Museum.

# PROCODECA UMBRINA, n. sp.

Male. Fore wing reddish umber-brown, with a curved discal series of six small black spots: hind wing and abdomen dull sepia-brown; thorax reddish umber-brown; palpi, fore legs above, and tarsi brownish-ochreous. Underside dull umber-brown.

Expanse  $1\frac{3}{10}$  inch.

Hab. Kullu. In coll. British Museum.

Larva violet-grey, each segment tufted with similar coloured hair, except the dorsal tufts on fourth to eighth segments, on which the hairs are blackish at the base and pale ferruginous at the tip; head shining black.

"Found under stones, March." (Hocking.)

# EUPROCTIS ABDOMINALIS, n. sp.

Male and Female. Cream-white; abdomen blackish; anal tuft ochreous; legs white.

Expanse,  $\delta 1\frac{1}{10}$ ,  $21\frac{3}{10}$  inch.

Hab. Dharmsala. In coll. British Museum.

Allied to E. postica. Wings comparatively longer and narrower.

ARTAXA SULPHURESCENS, n. sp.

Allied to A. trifasciata (Moore, Desc. Lep. Coll. Atkinson, p. 51): fore wing comparatively longer and narrower. Wings dull sulphurescent-yellow; hind wings palest, and in female almost white; fore wing with a few brownish scales above middle of the posterior margin. Anal segments and tuft ochreous-yellow; anal segments beneath black; second joint of palpi blackish at the side.

Expanse,  $\delta l_{\frac{1}{2}}^{\frac{5}{12}}$ ,  $\Omega l_{\frac{1}{2}}^{\frac{1}{2}}$  inch.

Hab. Dharmsala. In coll. British Museum and F. Moore.

DASYCHIRA DALBERGIÆ, n. sp.

Allied to D. inclusa. Male differs in having the fore wing longer and narrower, of a darker tint and greyer-speckled, transverse markings similar, excepting that the discal sinuous line is more oblique in position: hind wing pale cinereous brown. Female also differs in the shape of the fore wing, which is also darker and greyerspeckled; the hind wing also being paler.

Expanse,  $\delta 1\frac{5}{8}$ ,  $22\frac{2}{8}$  inches.

Hab. Dharmsala (Hocking), Masuri (Lang). In coll. British Museum and F. Moore.

Larva mottled with pale and dark brown; two white oblique dorsal streaks on hind part of fourth segment, and a small white dorsal spot on tenth and eleventh segments; each segment thickly tufted with brown radiating hairs, those on the second segment longest and projected over the head; on the fifth to eighth segments the dorsal tuft is ferruginous and more dense. Cocoon brown.

"Feeds on the Sissoo (Dalbergia sissoo); May 5 to June 7, 3000 feet." (Hocking.)

LYMANTRIA CARNECOLOR, n. sp.

Allied to L. concolor. Male and female of a vinaceous-white tint: fore wing with similarly disposed but more slender and less distinct markings: hind wing whitish, with a very slight pale dusky interrupted sinuons submarginal fascia, and marginal and cilial spots. Abdomen yellow above.

Expanse, 32,  $23\frac{1}{4}$  inches.

Hab. Dharmsala. In coll. British Museum and F. Moore.

LYMANTRIA NIGRA, n. sp.

Allied to L. marginata and L. pusilla. Male: fore wing with deep black transverse sinuous bands and spots, their interspaces dark vinaceous umber-brown: hind wing entirely black. Head and thorax slightly spotted with ochreous; abdomen ochreous, with black dorsal bands, lateral spots, and anal tuft. Female: fore wing with broad deep black confluent sinuous bands, their interspaces white: hind wing white, with a broad black marginal band, and a more or less distinct angular discocellular streak; cilia alternated with white. Thorax white above, with black collar and central spots; head white in

front; vertex ochreous; abdomen ochreous, with black dorsal band and lateral spots.

Expanse,  $\delta 1 \frac{8}{10}$ ,  $\mathfrak{D} 2 \frac{1}{2}$  inches.

Hab. Kangra Valley. In coll. British Museum. "Taken in copulâ, on the bark of a mango-tree." (Hocking.)

#### Fam. Notodontidæ.

HETEROCAMPA BASISTRIGA, n. sp.

Male and Female. Fore wing ochreous-grey, black-speckled; crossed by a subbasal zigzag grey-speckled duplex black line, from which an oblique black streak extends below the cell to base of wing; an oblique discal zigzag grey-speckled black fascia, a submarginal row of similar dentate spots, and a marginal row of larger quadrate spots; a lunule also at end of the cell: hind wing cinereous-white in male, darker in female, costal border brownish. Thorax, head, palpi, and legs hoary; abdomen cinereous-brown; tarsi with pale bands.

Expanse,  $\delta 1\frac{7}{8}$ ,  $22\frac{1}{8}$  inches.

Hab. Dharmsala. In coll. British Museum. Taken at sugar. Rare.

STAUROPUS BERBERISÆ, n. sp.

Dark grey: fore wing with a subbasal-outwardly oblique zigzag duplex black line traversed by pale grey; a pale grey-speckled black discocellular lunule, a small spot within the cell, and a spot below it, a submarginal zigzag series of black dentate spots, and a marginal row of similar spots, both series with inner grey-speckled borders: hind wing pale grey on posterior half, the anterior half dark grey traversed by black sinuous marks; a marginal row of pale-bordered darker lunules. Female darker grey; markings as in male. Body dark grey.

Expanse, of  $1\frac{6}{10}$ ,  $92\frac{1}{10}$  inches.

Hab. Dharmsala (6200 feet, Hocking), Umballa district (Reed). In coll. British Museum and F. Moore.

This is a darker insect than S. alternus, the markings of which differ in being reddish-brown. It is also distinct from S. indicus.

Larva brownish-ochreous, minutely spotted with dark brown, forming a darker band along the back, which is traversed by a central pale yellow slender line, and bordered by a lateral line; and on the side are two dark bands angulated downwards towards the claspers; sides of head dark brown; penultimate swollen segment edged with black spines; fore legs black banded; some larvæ are entirely dark brown.

"July 16, 6200 feet. Larva on wild barberry, Khaint and Kusmul, the wild pear. Other larvæ on August 3rd. Remained in

pupa 18 days." (Hocking.)

CERURA HIMALAYANA, n. sp.

Allied to C. vinula. Differs in being of a slightly darker grey tint: fore wing with the transverse subbasal series of black spots

nearer the base, the antemedial duplex sinuose macular line nearer the middle of the wing, and the discal acutely sinuous marks being composed of a discal line only, whereas in both *C. vinula* and *C. erminea* these marks are composed of three lines; a marginal row of spots on each wing in both sexes. Body darker grey; the black thoracic spots and abdominal bands less prominent.

Expanse,  $\delta 2\frac{3}{8}$ , Q 4 inches.

Hab. Dharmsala. In coll. British Museum.

"Larva on willow. Very like that of Cerura vinula." (Hocking.)

PHEOSA FASCIATA, n. sp.

Pale whitish-ochreous: fore wing with an oblique antemedial and a postmedial suffused greyish-ochreous and chestnut-brown shade, the former traversed by two transverse blackish irregular sinuous lines, and the latter by a curved discal less distinct but acutely sinuous line, the points of which are more prominently seen on the veins; a similar-coloured zigzag basal transverse streak, and an oblique apical costal streak; cilia alternated with ochreous-brown: hind wing paler; the costal and marginal border slightly suffused with ochreous-brown, and a darker patch at anal angle; cilia alternated with brown. Body hoary, thorax fringed with chestnut-brown; tarsi banded with chestnut-brown.

Expanse,  $\delta 1\frac{1}{2}$ ,  $\Omega 2$  inches.

Hab. Dharmsala (6200 feet). In coll. British Museum.

Larva green; an elongated dorsal protuberance on fifth segment; fifth to anal segment with oblique lateral red slender streaks and dots; a dorsal red-streaked band from head to anal segment; head and legs pale red.

"Feeds on cherry, June 20. Imago out July 16." (Hocking.)

#### Fam. Drepanulidæ.

DREPANA HYALINA, n. sp.

Male and Female. Creamy-white; semitransparent: fore wing with five more or less indistinct greyish-brown sinuous transverse lines, two of which are subbasal, two discal, and the other submarginal; the three middle lines sometimes slightly suffused inwardly with greyish-brown; a greyish-black spot at lower end of the cell; hind wing with similar but less distinct sinuous lines, which are visible only towards the abdominal margin. Palpi and legs yellowish; pectinations of antennæ brownish.

Expanse  $1\frac{4}{8}$  to  $1\frac{5}{8}$  inch.

Hab. Dharmsala. In coll. British Museum.

### DREPANA LILACINA, n. sp.

Male and Female. Lilacine-grey: both wings crossed by an ante-medial and a postmedial straight, slender, ochreous-brown line; the antemedial line on fore wing slightly dilated at the costal end, beyond which is a small brown costal spot between the two bands; both wings with two or three small indistinct black submarginal spots on middle of the exterior border. Extreme edge of the costa

on fore wing, a slender collar in front of thorax, and palpi, pale ochreous; front of head and legs dusky grey; shaft of antennæ steel-blue.

Expanse,  $\eth 1_{\overline{10}}^3$ ,  $\mathfrak{P} 1_{\overline{10}}^6$  inch. Hab. Dharmsala. In coll. British Museum. "Taken at sugar in September." (Hocking.)

Drepana simillima, il. sp.

Closely allied to D. lilacina. Male and female of same shape; pale brownish-ochreous: both wings crossed by a similar antemedial and a postmedial line, but both these lines are of a paler tint than the ground-colour of the wings, and they are also more irregular; the costal spots are larger, and there is a small spot at lower end of the cell, as well as those on the outer margin of both wings.

Expanse,  $\eth 1_{\overline{10}}^4$ ,  $\Im 1_{\overline{10}}^8$  inch. Hab. Dharmsala. In coll. British Museum.

#### Fam. SATURNIIDÆ.

SATURNIA HOCKINGII, n. sp.

Intermediate between S. lindia and S. grotei. From S. lindia it differs in its much darker greyish-brown colour. On the fore wing the transverse subbasal band is more acutely angulated outward on the median vein, the ocellus is larger and more oval in shape, the transverse zigzag lines are nearer the ocellus, thus giving a broader brown outer border, the submarginal border of which is more waved in the male and straighter in the female. On the hind wing the ocellus is larger and rounder, the transverse discal lines both uniformly waved and nearer the ocellus, the submarginal line being also waved.

From S. grotei it is at once distinguished by its difference of colour, S. grotei being ochraceous, larger ocelli and more acutely zigzag discal lines.

Expanse,  $3\frac{3}{4}$ , 9 4 inches.

Hab. Kullu. In coll. British Museum.

"Cocoon under stones. Cocoon pyriform, dark brown, hard, pointed, and lax at upper end."

Antheræa fraterna, n. sp.

Male. Dull deep ochreous; yellowish below costal border and on basal areas, and brownish ochreous on discal areas, with darker discal lunular fascia; subbasal bands distinct; submarginal red band broad, prominently white-bordered; ocelli oval, talcose centre small.

Female greyish ochreous, palest on outer borders, slightly yellowish on apical area; discal area dusky; discal lunular fascia brownish ochreous; ocelli larger, oval, subbasal and submarginal bands as in male.

Expanse,  $34\frac{3}{4}$ ,  $95\frac{1}{2}$  inches.

Hab. N.W. Himalaya (type, Kussowlee); Kangra. In coll. F. Moore and British Museum.

A comparatively smaller insect than A. sivalica, and distinguish-

able from it by the discal fascia being distinctly lunular and traversing the wings across the inner half of the ocelli; the submarginal transverse red hand is much nearer the ocelli on both wings, the interspace being only half the distance of that in A. sivalica.

#### Fam. LIMACODIDÆ.

MIRESA SUFFUSA, n. sp.

Male. Very pale brownish-ochreous: fore wing with a transverse submarginal slender brown slightly curved line; the basal area to the line suffused with pale reddish-ochreous. Thorax, head, palpi, and legs above pale reddish-ochreous.

Expanse  $\frac{3}{4}$  inch.

Hab. Dharmsala. In coll. British Museum.

MIRESA QUADRINOTATA, n. sp.

Pale greyish-ochreous: fore wing sparsely speckled with brown scales; apical area suffused with pale brownish-ochreous; a small black-speckled spot at end of the cell, and another spot within the cell: hind wing and body greyish-ochreous.

Expanse 3 inch.

Hab. Kangra; Kullu. In coll. British Museum.

Parasa hockingii, n. sp.

Wings brown: fore wing with a broad, medial, erect, excurved, transverse, green band. Thorax and front green.

Expanse  $1\frac{1}{8}$  inch.

Hab. Kangra Valley (3000 feet). Larva, November, on Toon (Cedrela toona).

Larva limaciform, pale green, wrinkled at the sides; above the spiracles two lateral rows of very small tubercular tufts of fine short yellowish hairs, the anterior and posterior tufts being a little larger; four subdorsal anterior and four posterior larger tubercular tufts of rigid black hairs; a dorsal blue-bordered crimson band with black angular lateral marks; a subdorsal and two lateral slender blue lines. Length  $\frac{5}{8}$  inch.

APHENDALA FASCIATA, n. sp.

Male. Umber-brown: fore wing very sparsely black speckled; with a transverse subbasal, a medial, and a marginal lilacine-grey silky fascia; a minute black spot at end of the cell. Cilia lilacine-grey.

Expanse  $1\frac{2}{10}$  inch.

Hab. Dharmsala. In coll. British Museum.

### Fam. LASIOCAMPIDÆ.

Вніма, п. д.

Wings semitransparent towards the outer border in male, less so in female; basal area hairy: fore wing narrow, elongated, triangular; costa slightly depressed in the middle, almost pointed at the apex; exterior margin very oblique and slightly cenvex; posterior

margin short; costal vein extending to two thirds the margin; cell extending to nearly one half the wing; first subcostal emitted at one fourth before end of the cell; second trifid, emitted immediately before the end, third at one half and fourth at one fourth beyond base of the second, the third terminating at the apex; fifth and sixth (or upper radial) on a footstalk beyond end of the cell; discocellular inwardly oblique, lower radial from slight angle above end of the cell; middle median at one third, and lower median at two thirds before end of the cell; submedian slightly depressed in the middle. Hind wing very short obovate; costa lobate at the base; lower end of the cell extending to one half the wing; costal vein deeply recurved, its base very convex, extending to only half the margin, furnished with two short ascending bifid spurs, the first (or precostal vein) starting straight upwards from its base, the second spur ascending obliquely from above middle of the basal arch; first subcostal emitted at one half the upper length of the cell and anastomosing with the concave portion of the costal for a short distance and then proceeding to the apex; discocellular oblique; two upper median veins from end of the cell, middle at one sixth and lower at one third before end of the cell; submedian and internal vein recurved. Body densely clothed with hair, abdomen extending half beyond hind wing in male, anal tuft very dense in female; head small, hairy in front; palpi short, pointed at tip, densely, but compactly clothed; legs densely hairy above; antennæ bipectinated, the pectinations plumose, and longest at the base in male.

Type, B. undulosa.

Allied to genus Taragama (Megasoma, Boisd.).

#### BHIMA UNDULOSA.

9. Pacilocampa undulosa, Walker, Catal. Lep. Het. B. M. vi.

p. 1477 (1855).

Male. Semitransparent. Wings fuliginous-black externally, fuliginous-bronze basally: fore wing crossed by two contiguous inwardly-oblique waved antemedial, and two lunular discal fuliginous-grey lines, and a submarginal zigzag black-bordered grey fascia; a grey lunule at end of the cell: hind wing with two indistinct grey discal fasciæ. Body fuliginous-brown; front of head ochreous; antennæ and legs black.

Female. Less semitransparent. Wings fuliginous ochreousbrown; the transverse markings ochreous-grey. Body and front of

head ochreous-brown; anal tuft ochreous.

Expanse,  $d 1\frac{7}{8}$ ,  $Q 3\frac{2}{8}$  inches.

Hab. Darjiling (Atkinson), Cherra Pinyi (Austen), Dharmsala (Hocking).

"Reared from a curious moss-like larva." (Hocking.)

Cocoon of pale rusty-brown silk, intermixed with short sharp spiny black hairs.

TARAGAMA CASTANOPTERA, n. sp.

Female. Differs from T. ganesa in its larger size. Both wings of

a dark chestnut vinaceous-red, with ochreous-white ciliæ: fore wing with similar, but more prominent ochreons-white transverse bands, the outer band being uniformly undulated, not angulated, and not showing the discal spot seen in *T. ganesa*; exterior border slightly greyish speckled: hind wing with a distinct ochreous-white transverse discal narrow fascia. Head, palpi above, front and top of thorax ochreous-white; tegulæ and abdomen dark chestnut-red, the latter with very slight greyish segmental fringe.

Expanse,  $93\frac{1}{2}$  inches.

Hab. Kangra Valley. In coll. British Museum. "Reared from pupa, spun in fern." (Hocking.)

#### VARMINA, n. g.

Fore wing elongated, triangular; costa almost straight, slightly arched at the end, apex somewhat acute; exterior margin oblique and slightly convex; posterior margin convex towards the base; costal vein straight, extending to two thirds the margin; cell long and broad, extending to two thirds the wing; first subcostal emitted at one half before end of cell; second at one fifth, third thrown off at a little beyond one half from its base and terminating before the apex; fourth from end of the cell, curving upward and anastomosing with third for a short distance and thence recurved upward and terminating before the apex; fifth from below fourth at a little beyond one half between its base and juncture with third; discocellular angled close to each end, concave in the middle, radials from the angles; middle median from angle close to end of the cell, lower median at nearly one third before end of the cell; submedian Hind wing short; costa arched, apex and exterior margin convex; cell broad, extending to two thirds the wing; two subcostals from end of the cell; discocellular concave, radial from below its middle; two upper medians from lower end of the cell; lower median at nearly one third before the end; submedian and internal vein slightly recurved. Body clothed with long, lax, silky hair, anal tuft somewhat long in male, thick in female; thorax stout; antennæ minutely pectinated in male; palpi laxly pilose; femora, tibiæ, and tarsi laxly pilose.

#### VARMINA INDICA.

Gluphisia indica, Walker, Catal. Lep. Het. B. M. v. p. 1039 (1855).

Male and Female. Fuliginous-grey: fore wing with five transverse oblique zigzag dusky-black fasciæ, the first, third, and fifth most distinct; the interspaces from base of wing to the fifth fascia numerously covered with minute orange-yellow spots, the outer border being bare: a grey-bordered black luvule at end of the cell, a spot in middle of the cell, and a submarginal row of short longitudinal linear grey-bordered black spots: hind wing uniformly fuliginous-grey, with an indistinct black luvule at end of the cell. Thorax greyish-white in male, pure white in female, with two transverse

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rows of black spots; abdomen covered with blackish silky hair, anal tuft greyish; head, palpi, and legs covered with silky grey hair.

Expanse, of  $1\frac{2}{10}$ , 9  $1\frac{6}{10}$  inch.

Hab. Dharmsala (Hocking); Umballa District (Capt. Reed). In coll. British Museum and F. Moore.

Larva purple-black, sparsely spotted with minute ferruginous-white dots; a lateral row of more distinct spots, white spiracles, and contiguous ferruginous speckles; the segments sparsely tufted with long hair, the lower and subdorsal rows from sixth to last segment whitish, the others pale ferruginous, each tuft arising from a bright ferruginous turbercle; two black dorsal longer and denser tufts on the fifth and one on the twelfth segment, also a long slender black tuft on each side of second segment projecting in front of the head; head black, face yellow.

"Larva on plum, April; pupa April 28; imago May 14."

EUPTEROTE FRATERNA, n. sp.

Male. Clear reddish-brown; fore wing crossed by a distinct blackish medial sinuous line and three indistinct more slender discal sinuous lines, each line being bent inward at the costal end; these are followed by two parallel outer discal straight but slightly recurved lines, and a submarginal indistinct zigzag line, the latter terminating in two greyish-speckled spots at the apex; between the medial line and base of wing are some scarcely distinguishable sinuous lines: hind wing crossed by three inner discal very indistinct slender sinuous lines, two parallel recurved distinct lines, and a submarginal, less distinct zigzag line. Underside slightly paler, the medial and the two parallel discal lines only being indistinctly visible.

Expanse  $3\frac{1}{2}$  inches.

Hab. Dharmsala. In coll. British Museum.

Allied to *E. invalida*, Butler (Types Lep. Het. B. M. v. pl. 96. f. 3). Distinguished from it by all the sinuous lines on forc wing being bent inward towards the costal end.

#### Fam. CYMATOPHORIDÆ.

THYATIRA COGNATA, n. sp.

Differs from *T. batis* in the fore wing being comparatively narrower and longer, the ground-colour greyish brown, the peach-coloured patches are duller but of a darker tint, and the medial patch on the posterior border is absent, the basal patch is more angular, being almost pointed below the cell, the transverse black sinuous lines between the patches are mostly with greyish-white borders. Hind wing and abdomen also greyer brown.

Expanse  $1\frac{5}{10}$  to  $1\frac{7}{10}$  inch.

Hab. Kangra. In coll. British Museum.

HABROSYNE FRATERNA, n. sp.

Paler than H. derasa. Differs on the fore wing in the outwardly-oblique subbasal white band being more curved towards the base of

the costal margin at its upper end, the white costal area being there also broader, the bordering ferruginous sinuous lines are narrower in extent, and the complex sinuous lines extending up the discal area are more distinctly defined, the white submarginal fascia is also somewhat more curved, and the marginal ferruginous lunules broader; both the orbicular and reniform spots are more constricted in their middle.

Expanse  $1\frac{7}{10}$  to  $1\frac{8}{10}$  inch.

Hab. Kangra. In coll. British Musenm.

This is quite distinct from H. indica, being distinguished from that species by its smaller size, wider space between the base of force wing and the outwardly oblique transverse line, the space within the base of the cell being pure white instead of ferrnginous, as in H. indica.

#### Fam. Bombycoide.

### Genus KARANA, Moore.

KARANA SIMILIS, n. sp.

Differs from the Darjiling K. decorata in its smaller size. Fore wing black, grey-speckled, with similar silvery-white markings, the subbasal comparatively narrower and more zigzag, the antemedial transverse band more erect, narrower, and with the two contiguous spots nearer the band, the reniform mark is narrower and more obliquely disposed, the discal transverse sinuous black line is more distinct and has grey-speckled borders, the submarginal black dentate points less conspicuous. Hind wing pale cinereous-white basally and pale cinereous-brown externally; cilia alternately cinereous-white and brown. Palpi and legs white-speckled.

Expanse  $1\frac{5}{10}$  inch.

Hab. Kangra. In coll. British Museum.

PALIMPSESTIS RENALIS, n. sp.

Purplish brownish-grey. Fore wing with a slender, black, erect, sinuous, antemedial line, and an outwardly-angulated postmedial line; contignous to the latter are two or three less distinct lines, followed by a more distinct submarginal denticulated line and a marginal row of short linear spots; between the medial bands the area is grey, the orbicular and reniform spot is pinkish, and both are bordered posteriorly by a raised tuft of brown scales. Hind wing dusky brown. Legs with indistinct brownish bands.

Expanse  $1\frac{6}{12}$  to  $1\frac{8}{12}$  inch.

Hab. Kangra. In coll. British Museum.

PALIMPSESTIS ORBICULARIS, n. sp.

Male and Female. Dusky brownish-grey. Fore wing with a slender, distinct, black, transverse antemedial and a postmedial waved line; orbicular and reniform spot black-lined, the former with a whitish centre; between the antemedial line and the base are four or five transverse, indistinct, pale-bordered, blackish sinuous lines, and

beyond the postmedial line are two similar but wider-separated discal lines, the outer lines being most distinct and ending at the apex; a less distinct line also contiguous to the postmedial line; along the extreme outer margin is a fine black lunular line. Hind wing grey-ish-brown, indistinctly paler across the middle; cilia cinereous. Thorax, head, palpi, and legs, above, greyish-brown; legs with black bands.

Expanse, of  $1\frac{6}{12}$ ,  $21\frac{8}{12}$  inch. Hub. Kangra. In coll. British Museum.

PALIMPSESTIS ALBIDISCA, n. sp.

Fore wing greyish olive-brown, the posterior base and disc slightly suffused with pink, crossed by a medial, waved, sinuous, distinct black line, followed by five or six paler sinuous lines, each of which are angulated outward at the upper median vein; beyond these is a more distinct but less sinuous line, which is blackest at the apical end; marginal line also black; between the medial line and the base are three indistinct waved black lines with slight whitish-speckled borders, and at the base is a short longitudinal black-crested streak with white lower edge; the area between the medial line and the third discal line is white below the cell. Hind wing pale greyish brown. Thorax, head, and palpi olivaceous hoary; legs with black bands.

Expanse  $1\frac{5}{12}$  inch.

Hab. Kangra. In coll. British Museum.

Diphtera fasciata, n. sp.

Fore wing pale green; with a black basal costal streak, a basal posterior streak which is bent upward below the cell, two small costal streaks, followed by a broad costal streak which is continued across end of the cell, beyond this are two smaller costal streaks and a larger dentate spot, from the latter extends a dark green waved fascia, which has a slender, black, sinuous, inner-bordered line, the exterior border being sparsely speckled with minute black scales; cilia with an alternate white and black sinuous border. Hind wing bluish-white. Body pale green; palpi and legs greenish-white with black bands.

Expanse  $1\frac{6}{10}$  inch.

Hab. Kangra. In coll. British Museum.

#### Genus TRIÆNA.

TRIÆNA DENTICULATA, n. sp.

Male. Fore wing brownish-grey; crossed by slender, sinuous, indistinct blackish lines with grey-speckled borders, of which the basal is acute and the discal lines are most apparent; a marginal row of black points; orbicular mark oblique, with greyish-white centre; from the base below the cell extends a longitudinal black streak to the antemedial line, and a similar streak from the postmedial line to the exterior margin. Hind wing white; veins dusky-brown; with a

marginal row of brown lunules, which also extend across the cilia. Thorax, head, palpi, and legs brownish-grey; abdomen paler. Female. Fore wing greyer than in male, the transverse lines slightly more distinct, the longitudinal black streak continued from the base to exterior margin.

Expanse  $1\frac{1}{2}$  inch.

Hab. Kangra. In coll. British Museum.

### Genus Hyboma, Hübner.

HYBOMA DIVISA, n. sp.

Allied to the European *H. strigosa*, much larger in size. Fore wing dark grey, with a slight violaceous tint; the transverse antemedial black double line less sinuous, the postmedial sinuous double line blacker, the intermedial area being ontwardly crossed by a zigzag, blackish, fasciated band, the longitudinal blackish streak below the cell is in a continuous line from the base to outer margin. Hind wing greyish-brown. Thorax, head and palpi, and legs above, dark hoary-grey; palpi and legs with black bands; abdomen greyish-brown.

Expanse,  $\delta 1\frac{3}{8}$ ,  $\Omega 1\frac{4}{8}$  inch. Hab. Kangra. In coll. British Museum.

# Fam. LEUCANIIDÆ.

Genus Tympanistes, Moore.

Tympanistes rubidorsalis, n. sp.

Fore wing pale pinkish whitish-ochreous, densely but indistinctly irrorated with minute brown scales; reniform mark small, with brown-speckled border; a marginal row of minute black dots. Hind wing pinkish-white, the abdominal border suffused with pale pink. Thorax, head, palpi, and legs above very pale brownish-ochreous; abdomen white beneath, pinkish-red above.

Expanse  $1\frac{7}{8}$  inch.

Hab. Kangra. In coll. British Museum.

# Genus Axylia, Hübner.

AXYLIA TRISERIATA, n. sp.

Fore wing greyer in tint of colour than in A. putris; the costal border and markings darker, the transverse subbasal zigzag lines less acutely angled, the two transverse discal rows of dots situated nearer towards the outer margin; between the inner rows of dots and the reniform mark is a distinct third row of very similar dots, the marginal row of dentate points are also less distinct. Hind wing pale purplish cinereous-brown.

Expanse  $1\frac{4}{10}$  inch.

Hab. Kangra. In coll. British Museum.

LEUCANIA IRRORATA, n. sp.

Fore wing pale greyish-ochreous, sparsely irrorated with minute

black scales, some of which are elustered somewhat linearly below base of the cell and beyond its end; a black spot at lower end of the cell, and a marginal row of minute black dots. Hind wing pale cinereous-brown; cilia white. Body greyish-ochreous; palpi and legs above darker; tip of abdomen cinereous-brown.

Expanse  $1\frac{4}{10}$  inch.

Hab. Kangra. In coll. British Museum.

LEUCANIA PERCISA, n. sp.

Fore wing greyish pinkish-ochreous, with a conspicuous white line extending along the median vein from base to exterior margin, the line bordered on both sides by purplish-black, most strongly beneath at the base, the black also extending upward to the apex; a black spot at lower end of the cell, and a discal and marginal row of less distinct minute black dots. Hind wing cinereous-white, with pale cinereous-brown outer border; cilia white. Body greyish-ochreous; a blackish collar across the thorax; head ochreons-brown; palpi and legs dusky-brown.

Expanse,  $\delta l_8^3$ ,  $2 l_8^4$  inch.

Hab. Kangra. In coll. British Museum.

LEUCANIA BIFASCIATA, n. sp.

Fore wing pale purplish-red, with a pale yellowish fascia along base of the costa and another along the posterior margin; median and outer veins to the margin whitish, the former with a slightly black border, and the latter with an indistinct intermediate black streak ascending to the apex; an indistinct discal row of minute black dots. Hind wing pale cinereous-brown, suffused with red on the margin and cilia. Body pale yellow, tip of abdomen ochreous; thoracic crest tipped with red; palpi and legs purplish-red.

Expanse  $1\frac{3}{10}$  inch.

Hab. Kangra. In coll. British Museum.

Allied to L. griseifasciata.

ALETIA FRATERNA, n. sp.

Allied to A. albicosta, both the fore and hind wing and the body being of a dark purplish reddish-ochreous colour. Fore wing with paler short transverse strigæ; median veins and discoidal streak greyish; the orbicular and reniform spot obsolete. Underside of both wings and body also much darker coloured.

Expanse,  $3 \frac{13}{4}$  inch.

Hab. Kangra. In coll. British Museum.

ALETIA EXANTHEMATA, n. sp.

Fore wing yellowish-ochreous, speckled with purplish ochreous, the speckles being more or less confluent along the costal border; across the wing is a curved antemedial and a waved postmedial blackish-speckled line, followed by a similar speckled discal line and a marginal row of dots; between the latter is a dusky submarginal

waved line; orbicular and reniform spot almost free from the darker speckles. Hind wing pale yellow, with a suffused dusky-brown margin; cilia pale yellow. Thorax and head yellowish-ochreous; palpi and legs purplish-ochreous.

Expanse  $1\frac{3}{10}$  to  $1\frac{5}{10}$  inch.

Hab. Kangra. In coll. British Museum.

ALETIA RUDIS, n. sp.

Allied to A. obscura. Fore wing brownish-ferruginous, very sparsely irrorated with minute blackish scales and with indistinctly darker brownish-ferruginous short transverse strigæ, which are most apparent in the female; veins greyish; a small whitish spot at lower end of the cell, at base of upper medians, the spot with black-speckled border; a very indistinct pale reniform spot, which in the female is slightly bordered with black scales; a very indistinct, transverse, discal, black-speckled line, the points only of which are seen in the male. Hind wings ferruginous-brown, palest at the base.

Expanse, of  $l_{10}^4$ , Q  $l_{10}^6$  inch.

Hab. Kangra. In coll. British Museum.

#### Fam. CARADRINIDÆ.

CARADRINA FARINACEA, n. sp.

Fore wing minutely white-speckled; crossed by a very indistinct basal, subbasal, medial, and a discal, sinnous, slender, blackish line, followed by a submarginal lunular line; the orbicular spot indistinct; reniform spot with black-speckled border and central dots. Hind wing greyish-white, with a slight greyish-brown border; cilia white. Body and legs grey; tarsi with brown bands.

Expanse  $1\frac{1}{4}$  inch.

Hab. Kangra. In coll. British Museum.

### Fam. HELIOTHIDE.

Genus PRADATTA, Moore.

PRADATTA BIMACULATA, n. sp.

Male. Fore wing pale straw-yellow, the veins indistinctly lined with ochreous-red; a minute, black, discocellular dot at upper end of the cell: hind wing white. Body pale straw-yellow; thorax in front and palpi brighter; fore legs above ochreous-brown, tibial claws black.

Expanse  $\frac{3}{4}$  inch

Hab. Dharmsala. In coll. British Museum.

# Genus Masalia, Moore.

Masalia tosta, n. sp.

Female. Fore wing ochreous-red, with a slight pale yellow streak extending through end of the cell to near the outer margin; costal edge also pale yellow; cilia slightly edged with white. Hind wing

pale straw-yellow; veins and outer border slightly speckled with minute red scales; cilia with a pale red inner border. Underside pale ochreous-yellow; veins of fore wing and costal border of hind wing ochreons-red. Thorax, front of head, palpi, and legs above ochreous; fore tibial claws black; abdomen pale straw-yellow.

Expanse  $1\frac{1}{4}$  inch.

Hab. Dharmsala. In coll. British Museum.

#### Fam. Anthophilidæ.

# Genus Metachrostis, Hübner. (Syn. Leptosia, Guénée.)

METACHROSTIS CONTINGENS, n. sp.

Dark grey. Fore wing with a basal and three equidistant transverse more or less interrupted brown waved bands; the third band broadest at end of the cell and there forming a reniform spot; before which is an orbicular spot; a submarginal sinuous pale line. Hind wing cinereous-grey, with short, posterior, sinuous, brown-speckled bands; a marginal black lunular line to both wings. Body, palpi, and tarsal bands dark grey; legs cinereous.

Expanse  $\frac{9}{12}$  inch.

Hab. Dharmsala. In coll. British Museum.

#### Fam. ACONTIDE.

# Genus CANNA, Walker.

CANNA SPLENDENS, n. sp.

Male. Upperside: fore wing with a large, broad, waved-bordered, pale emerald-green patch, which terminates in a small lower spot on hind margin near the base, both with dark brown speckled margins; outer area of wing pale green, crossed by a white lunular discal line; a white-centred brown anterior spot and a white posterior spot on exterior margin; two minute spots also on costa before the apex; cilia green, alternated with brown; hind wing pale pinkish-brown; margin palest. Body pale brown: front of thorax and vertex emerald-green, hind part of thorax and dorsal tuft on middle of abdomen black-fringed.

Expanse  $1\frac{2}{8}$  inch.

Hab. Dharmsala, 6200 fcet; August. In coll. British Museum.